

S. N. KRAWCHENKO.
LIQUID MEASURE.
APPLICATION FILED JULY 28, 1909.

961,452.

Patented June 14, 1910.

2 SHEETS—SHEET 1.

Fig. 1.

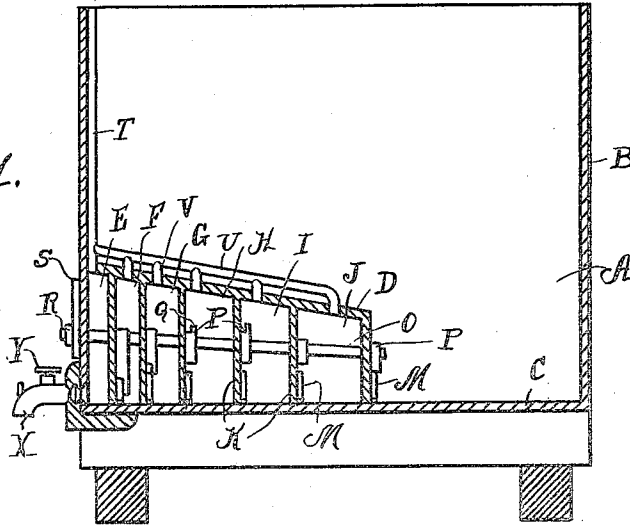


Fig. 2.

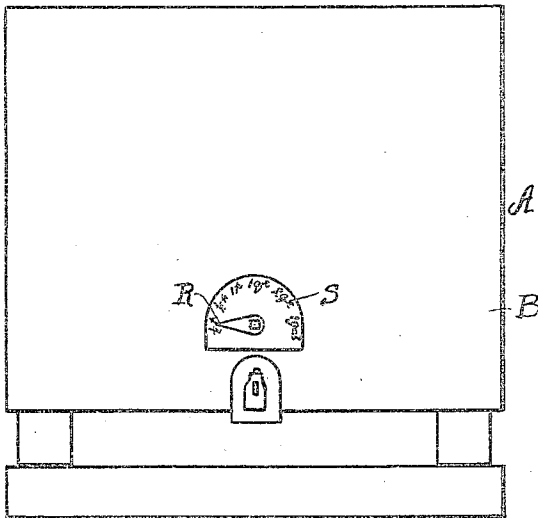
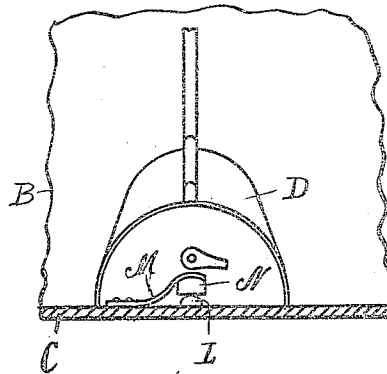


Fig. 3.



WITNESSES

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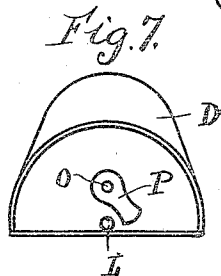
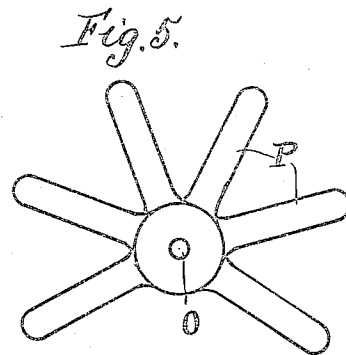
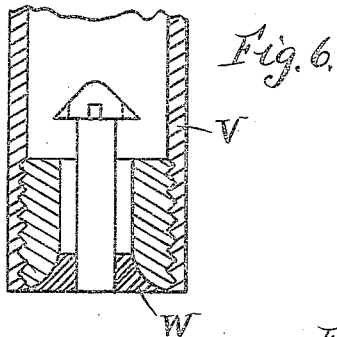
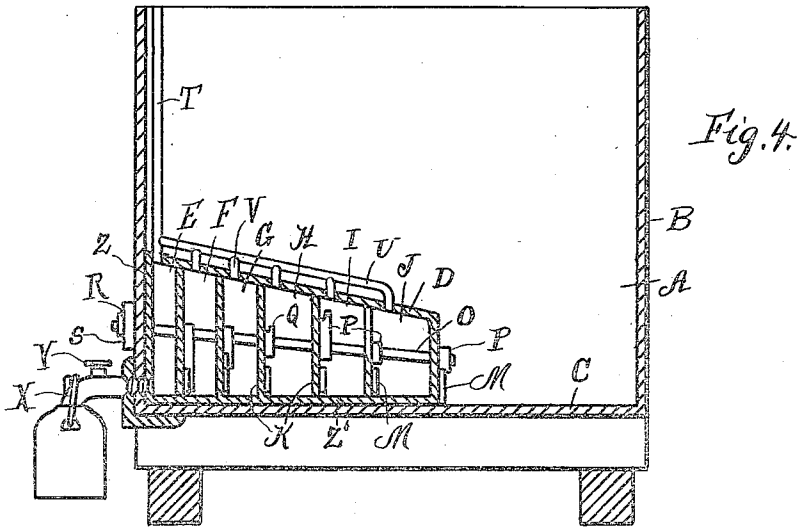
ATTORNEY

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WITNESSES

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UNITED STATES PATENT OFFICE.

SAMUEL N. KRAWCHENKO, OF WILMINGTON, DELAWARE.

LIQUID-MEASURE.

961,452.

Specification of Letters Patent. Patented June 14, 1910.

Application filed July 28, 1909. Serial No. 510,115.

To all whom it may concern:

Be it known that I, SAMUEL N. KRAWCHENKO, a citizen of the United States, residing at Wilmington, in the county of New-castle and State of Delaware, have invented a certain new and useful Improvement in Liquid-Measures, of which the following is a specification.

My invention relates to a new and useful improvement in liquid measures, and has for its object to provide an exceedingly simple and effective device of this character, whereby any given amount of liquid may be withdrawn from a tank.

Another object of the invention is to provide a device which may be built with the tank when the same is being constructed, or it may be set into a tank with very little expense and labor.

By using my improved liquid measure it is not required to have a pump for forcing the liquid from the tank, as it will flow through the measure by gravity. Neither is it required to have a number of individual measures which are used at the present time. My improvement also eliminates most of the dirty work in drawing such liquids as oil, for by turning the pointer to the amount desired to draw, then placing a can upon the spigot and turning the same, the correct amount of liquid will enter the can.

With these ends in view, this invention consists in the details of construction and combination of elements hereinafter set forth and then specifically designated by the claims.

In order that those skilled in the art to which this invention appertains may understand how to make and use the same, I will describe its construction in detail, referring by letter to the accompanying drawing forming a part of this specification, in which—

Figure 1 is a vertical sectional view showing my invention constructed with the tank. Fig. 2, a front elevation of the tank. Fig. 3, a sectional view of the tank at the rear of the device. Fig. 4, a vertical sectional view showing the device placed in a tank. Fig. 5, an end view of the device for opening and closing the different compartments of the measure. Fig. 6, an enlarged sectional view of the end of one of the air

pipes. Fig. 7, an end view of a still further modified form of my invention.

In carrying out my invention as here embodied, A represents a tank having side walls B and a bottom C. Within this tank is secured a semi-circular casing D which is high and narrow at the front end and which gradually slants toward the rear until it is lower and wider than the front end. This casing is divided into a number of compartments E, F, G, H, I and J by the partitions K, each of which is provided with an opening L at its lower end.

In proximity to each of the openings L is secured a spring M having a stopper N attached thereto, said spring normally holds the stopper N away from the opening L. Passing through the wall of the tank and the partitions K is a shaft O on which are fastened a number of closing members P each of which has formed with its outer end a projection Q, which engages with the edge of the spring M for drawing the stopper N into contact with the face of the partition when said stopper is forced downward by the end of the closing member P, thus tightly closing the opening L. These members P are set upon the shaft in a spiral line so that they project at different angles and their outer ends are out of alinement. On the outer end of the shaft is secured a pointer R which is adapted to register with a dial S upon the face of the tank. When the shaft is turned one of the closing members P will be brought into contact with one of the springs M which will press the stopper N down over the opening L and the projection Q will press said stopper inward against the face of the partition K about said opening, thus completely closing the opening L to prevent the liquid passing through the same.

T represents an air pipe leading from the top of the tank to the top of the first compartment E, and from this pipe leads a branch pipe U which is connected to each of the other compartments by a short connection V. Each of the pipes which leads to a compartment has a valve W mounted therein so that the pressure of the liquid will close the same. Leading from the measure is a spigot X having a detachable handle Y for turning the valve within the spigot when the liquid is to be withdrawn.

The compartments E and F are of such size that when they are filled they will each hold a half pint. The compartment G holds a pint, the compartment H a quart, the compartment I two quarts and the compartment J one gallon.

The operation of the device is as follows:—When the pointer R is pointing directly downward or to a point marked open, the closing members P will all be in such position that none of them will be resting upon the springs M, thus the holes L within the partitions will be open, allowing the liquid to flow into the different compartments, and as the compartments are filled the liquid will press against the valve W in each of the air pipes, which will close the same so as to prevent the liquid entering said pipes. When all of the compartments are filled, and it is desired to draw off a half pint, the pointer R is turned to a point marked one-half pint, at which time the closing member P back of the partition K forming one side of the compartment E will be resting upon the spring M causing the stopper N to close the opening L through said partition, then by turning on the spigot the liquid may be withdrawn from said compartment E, while all of the other compartments will remain in tap. When the spigot is turned off the pointer R is then turned back to the point marked open, which will allow all of the compartments to again be filled. The operation in each case is similar, for as the pointer R is turned it will cause the shaft O to be turned, thus bringing one of the closing members P upon its spring, and when the opening in one of the partitions is closed all the others will be open. To draw off a pint of liquid the first two compartments are used, to draw off a quart, the first three compartments are used, to draw off two quarts, four compartments are used, four quarts or a gallon five compartments are used, and two gallons all of the compartments are used. Of course it is understood that the measure may be divided up into any number of compartments and each of said compartments may hold any desired amount.

In my modified form as shown in Fig. 4, I form a front Z and a bottom Z' with the casing D, so that it may be set into any tank, and it will only be required to form a hole in the tank for the passage of the shaft O.

In my modified form as shown in Fig. 7, I form the closing members P of sufficient width to close the openings L, so that when one of said closing members is over one of said openings the same will be closed so as to prevent the liquid flowing through the same.

Of course I do not wish to be limited to the exact details of construction here shown,

as these may be varied within the limits of the appended claims without departing from the spirit of my invention.

Having thus fully described my invention, what I claim as new and useful, is—

1. As a new article of manufacture, a liquid measure composed of a casing, partitions for dividing said casing into a number of compartments, said partitions having openings formed therein, a shaft passing through said partitions, closing members secured thereto, springs secured adjacent to the openings, and stoppers secured to the free ends of said springs for closing the openings when the closing members are brought in contact therewith.

2. In a liquid measure, a casing, partitions having openings formed therein said partitions dividing said casing into a number of compartments, a shaft passing through the partitions, closing members secured to said shaft in such way that their lower ends are out of alinement, projections formed upon said closing members, springs secured adjacent to the openings, stoppers attached to the free ends of said springs for closing the openings when the closing members and the projections thereon are brought in contact with the springs, and means for supplying the compartments with air.

3. In combination with a tank, a liquid measure, a casing, partitions having openings formed therein said partitions dividing said casing into a number of compartments, a shaft passing through the partitions, closing members secured to said shaft in such way that their lower ends are out of alinement, projections formed with said closing members, springs secured adjacent to the openings, stoppers attached to the free ends of said springs for closing the openings when the closing members and the projections thereon are brought in contact with the springs, a pointer secured to the outer end of the shaft adapted to register with a dial upon the face of the tank, a spigot for withdrawing the liquid, and means for supplying the compartments with air.

4. In combination with a tank, a liquid measure, a casing, partitions having openings formed therein said partitions dividing said casing into a number of compartments, a shaft passing through the partitions, closing members secured to said shaft in such way that their lower ends are out of alinement, projections formed upon said closing members, springs secured adjacent to the openings, stoppers attached to the free ends of said springs for closing the openings when the closing members and the projections thereon are brought in contact with the springs, a pointer secured to the outer end of the shaft adapted to register with a dial upon the face of the tank, a spigot for

withdrawing the liquid, an air pipe leading
from the top of the tank to one of the com-
partments, a branch pipe, connections lead-
ing from said branch pipe to the other com-
5 partments, and valves situated in the con-
nection and pipe leading to the compart-
ments, for the purpose set forth.

In testimony whereof, I have hereunto
affixed my signature in the presence of two
subscribing witnesses.

SAMUEL N. KRAWCHENKO.

Witnesses:

LAWRENCE J. BROMAN,

ANDREW J. SHERRY.